

Untitled
SEQUENCE LISTING

IAP20 Rec'd IFC IAP20 27 JAN 2006

<110> Alphey, Luke
 <120> Expression Systems for Pest Control
 <130> WPP88353

 <150> unassigned
 <151> 2006-01-27

 <150> PCT GB2004/003263
 <151> 2004-07-28

 <150> UK 0317656.7
 <151> 2003-07-28

 <160> 33
 <170> PatentIn version 3.2

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7-06.WPP88353.txt

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| ggtacccggg | gatccccgct | cgagctgaat | aggggaattgg | gaattggagc | agaggtgggt | 540 |
| tcttcgcatt | acactgttcg | ccacaatctt | gtttattcat | tcgccttgca | ggttgccacc | 600 |
| atggaattga | gattagataa | aagtaaagt | attaacagcg | cattagagct | gcttaatgag | 660 |
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| ttagataggc | accatactca | cttttgccct | ttagaagggg | aaagctggca | agatttttta | 840 |
| cgtaataacg | ctaaaagttt | tagatgtgct | ttactaagtc | atcgcgatgg | agcaaaagta | 900 |
| catttaggta | cacggcctac | agaaaaacag | tatgaaactc | tcgaaaatca | attagccttt | 960 |
| ttatgccaac | aaggtttttc | actagagaat | gcattatatg | cactcagcgc | tgtggggcat | 1020 |
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| acacctacta | ctgatagtat | gccgccatta | ttacgacaag | ctatcgaatt | atttgatcac | 1140 |
| caaggtgcag | agccagcctt | cttattcggc | cttgaattga | tcatatgcgg | attagaaaaa | 1200 |
| caacttaaat | gtgaaagtgg | gtccgcgtac | agccgcgcgc | gtacgaaaaa | caattacggg | 1260 |
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| ccgggattta | ccccccacga | ctccgcccc | tacggcgctc | tggatatggc | cgacttcgag | 1560 |
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| tctagagctg | agaacttcag | ggtgagtttg | gggacccttg | attgttcttt | cttttctgct | 1680 |
| attgtaaaat | tcatgttata | tggagggggc | aaagttttca | gggtgttggt | tagaatggga | 1740 |
| agatgtccct | tgtatcacca | tggaccctca | tgataatttt | gtttctttca | ctttctactc | 1800 |
| tgttgacaac | cattgtctcc | tcttattttc | ttttcatttt | ctgtaacttt | ttcgttaaac | 1860 |
| tttagcttgc | atttgtaacg | aatttttaaa | ttcacttttg | tttatttgct | agattgtaag | 1920 |
| tactttctct | aatcactttt | ttttcaaggc | aatcagggta | tattatattg | tacttcagca | 1980 |
| cagttttaga | gaacaattgt | tataattaaa | tgataaggta | gaatatttct | gcatataaat | 2040 |
| tctggctggc | gtggaaatat | tcttattggg | agaaacaact | acaccctggg | catcatcctg | 2100 |
| cctttctctt | tatggttaca | atgatataca | ctgtttgaga | tgaggataaa | atactctgag | 2160 |
| tccaaaccgg | gcccctctgc | taaccatggt | catgccttct | tctctttcct | acagctcctg | 2220 |

7-06.WPP88353.txt

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| caggctgcct | atcagaaggt | ggtggctggt | gtggccaatg | ccctggctca | caaataccac | 2340 |
| tgagatcttt | ttccctctgc | caaaaattat | ggggacatca | tgaagcccct | tgagcatctg | 2400 |
| acttctggct | aataaaggaa | atttattttc | attgcaatag | tgtgttggaa | ttttttgtgt | 2460 |
| ctctcactcg | gaaggacata | tgggagggca | aatcatttaa | aacatcagaa | tgagtatttg | 2520 |
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| agttttgaat | atccttctcc tgactttctt atttagaatt aatataatac tgcatacatt 180 |
| aatactgtaa | atatgataag tacctgcaaa aactgcagc tcaagtctta atgaggttct 240 |
| gcgatagctt | agcataatta gtaacttatt gcgcagaatt ccctaattgtt cccgacctac 300 |
| atgtacttct | gatagttgcc gaggtcaaat gttgttgtat ttgtattata cctcaatatt 360 |
| ggtatattca | atatctaata gtaccaat caattgcaaa gatagtcatt aaaaaaacct 420 |
| aaatcacttg | caaattgact tttctgccgg aaaagcaacc ttgacacaca aagttaatta 480 |
| gtttatctgg | aagtcattgt agaaatttgt aaataaaatt tttcgcagta atttaagtgg 540 |
| gcctaattcc | ttttaagcat cttggtttta cgatgacacc gcaataaggt acaactttat 600 |
| attgtttttg | caatcagctt gagtctttat taggcatcag tctttctctc taagtttctt 660 |
| cgtgcaataa | atgaggttcc aaactccgta gatttttcct tctttgttga atccagatcc 720 |
| tgcaaagaaa | aaagagcaaa cccctaggtc tgtccaggaa tgtattttcg tgtttgcga 780 |
| tcgaccatgg | tctcgagagg ccttgagacc aagctttgcg tactcgcaaa ttattaaaaa 840 |
| taaaacttta | aaaataattt cgtctaatta atattatgag ttaattcaaa cccacggac 900 |
| atgctaaggg | ttaatcaaca atcatatcgc tgtctcactc agactcaata cgacactcag 960 |
| aatactattc | ctttcactcg cacttattgc aagcatacgt taagtggatg tctcttgccg 1020 |
| acgggaccac | cttatgttat ttcatcatgg tctggccatt ctcatcgtga gcttccgggt 1080 |
| gctcgcatat | ctggctctaa gacttcgggc ccgacgcaag gagtagccga catatatccg 1140 |
| aaataactgc | ttgttttttt ttttaccatt attaccatcg tgtttactgt ttattgcccc 1200 |
| ctcaaaaagc | taatgtaatt atatttgtgc caataaaaac aagatatgac ctatagaata 1260 |

7-06.WPP88353.txt

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| gacttacaca | cctgcatacc | ttacatcaaa | aactcgttta | tcgctacata | aaacaccggg | 1380 |
| atatatTTTT | tatatacata | cttttcaaat | cgcgcgccct | cttcataatt | cacctccacc | 1440 |
| acaccacgtt | tcgtagttgc | tctttcgctg | tctcccaccc | gctctccgca | acacattcac | 1500 |
| cttttgttcg | acgaccttgg | agcgactgtc | gttagttccg | cgcgattcgg | tgcggtatTT | 1560 |
| cacaccgcat | atggtgcact | ctcagtacaa | tctgctctga | tgccgcatag | ttaagccagc | 1620 |
| cccgaacccc | gccaacaccc | gctgacgcgc | cctgacgggc | ttgtctgctc | ccggcatccg | 1680 |
| cttacagaca | agctgtgacc | gtctccggga | gctgcatgtg | tcagaggTTT | tcaccgtcat | 1740 |
| caccgaaacg | cgcgagacga | aagggcctcg | tgatacgcct | atTTTTatag | gttaatgtca | 1800 |
| tgataataat | ggtttcttag | acgtcaggtg | gcacttttcg | gggaaatgtg | cgcggaaccc | 1860 |
| ctatttgTTT | atTTTTctaa | atacattcaa | atatgtatcc | gctcatgaga | caataaccct | 1920 |
| gataaatgct | tcaataatat | tgaaaaagga | agagtatgag | tattcaacat | ttccgtgtcg | 1980 |
| cccttattcc | ctTTTTtgcg | gcattttgcc | ttcctgtTTT | tgctcaccca | gaaacgctgg | 2040 |
| tgaaagtaaa | agatgctgaa | gatcagttgg | gtgcacgagt | gggttacatc | gaactggatc | 2100 |
| tcaacagcgg | taagatcctt | gagagtTTTc | gccccgaaga | acgtTTTcca | atgatgagca | 2160 |
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| tcggtcgccg | catacactat | tctcagaatg | acttggttga | gtactcacca | gtcacagaaa | 2280 |
| agcatcttac | ggatggcatg | acagtaagag | aattatgcag | tgctgccata | accatgagtg | 2340 |
| ataaactgc | ggccaactta | cttctgacaa | cgatcggagg | accgaaggag | ctaaccgctt | 2400 |
| ttttgcacaa | catgggggat | catgtaactc | gccttgatcg | ttgggaaccg | gagctgaatg | 2460 |
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| cagatggtaa | gccctcccgt | atcgtagtta | tctacacgac | ggggagtcag | gcaactatgg | 2760 |
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| cagaccaagt | ttactcatat | atactttaga | ttgatttaaa | acttcatttt | taatttaaaa | 2880 |
| ggatctaggT | gaagatcctt | tttgataatc | tcatgaccaa | aatcccttaa | cgtgagtttt | 2940 |
| cgttccactg | agcgtcagac | cccgtagaaa | agatcaaagg | atcttcttga | gatccttttt | 3000 |
| ttctgcgctg | aatctgctgc | ttgcaaacaa | aaaaaccacc | gctaccagcg | gtggtttggt | 3060 |
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| caccgcctac | atacctcgct | ctgctaatacc | tgttaccagt | ggctgctgcc | agtggcgata | 3240 |
| agtcgtgtct | taccgggttg | gactcaagac | gatagttacc | ggataaggcg | cagcggtcgg | 3300 |
| gctgaacggg | gggttcgtgc | acacagccca | gcttggagcg | aacgacctac | accgaactga | 3360 |
| gataacctaca | gcgtgagcta | tgagaaagcg | ccacgcttcc | cgaagggaga | aaggcggaca | 3420 |
| ggtatccggt | aagcggcagg | gtcggaaacag | gagagcgcac | gagggagctt | ccagggggaa | 3480 |
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| cggtgtttta | tgtagcgata | aacgagtttt | tgatgtaagg | tatgcagggtg | tgtaagtctt | 4980 |
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7-06.WPP88353.txt

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| ggatatatgt | cggctactcc | ttgcgtcggg | cccgaagtct | tagagccaga | tatgcgagca | 5220 |
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| cgggactcga | tctcccgtcc | gggcacaacg | gccaacacct | gtacgtaaaa | gtccgccgga | 6480 |
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7-06.WPP88353.txt

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| cgccatccgg | agcccggtg | attgaccgcc | ccaaagatgt | ccatattgtg | ccaggcatag | 7440 |
| gtgaggttct | cggctagtgt | gccgctccct | gaaccggagt | cctccggcgg | actgggtggc | 7500 |
| aggagcgtgc | cgtagttttt | ggcctgcccg | aagccctggg | taatgcagct | ctgcgaagcg | 7560 |
| tccgctgtca | ccctgcaatg | ataggggatc | tcaaataatca | actacaagcg | ttatgctcat | 7620 |
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| aggagaacga | gctgatctag | tatctctcca | caatccaatg | ccaactgacc | aactggccat | 8820 |

7-06.WPP88353.txt

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| gtttttcacc | gttcccgggg | ccattttcaa | agactcgtcg | gtaagataag | attgtgtcac | 8940 |
| tcgctgtctc | tcttcatttg | tcgaagaatg | ctgaggaatt | tcgcatgac | gtcggcgagt | 9000 |
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| atattgttta | tgaagctgtt | tgacttcaaa | acacacaaaa | aaaaaaataa | aacaaattat | 9960 |
| ttgaaagaga | attaggaatc | ggacagctta | tcgttacggg | ctaacagcac | accgagacga | 10020 |
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7-06.WPP88353.txt

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 <212> DNA
 <213> Artificial

<220>
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<400> 16
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 aagccaatga agaacctggg tgttcaataa cttttgttc gtctaataatt tcactaccgc 180

7-06.WPP88353.txt

| | | | | | | |
|-------------|------------|------------|-------------|-------------|-------------|------|
| ttgacgttgg | ctgcacttca | tgtacctcat | ctataaacgc | ttcttctgta | tcgctctgga | 240 |
| cgtcattcttc | acttacgtga | tctgatattt | cactgtcaga | atcctcacca | acaagctcgt | 300 |
| catcgctttg | cagaagagca | gagaggatat | gctcatcgtc | taaagaacta | cccattttat | 360 |
| tatatattag | tcacgatatc | tataacaaga | aaatatatat | ataataagtt | atcacgtaag | 420 |
| tagaacatga | aataacaata | taattatcgt | atgagttaaa | tcttaaaaagt | cacgtaaaag | 480 |
| ataatcatgc | gtcattttga | ctcacgcggt | cgttatagtt | caaaatcagt | gacacttacc | 540 |
| gcattgacaa | gcacgcctca | cgggagctcc | aagcggcgac | tgagatgtcc | taaatgcaca | 600 |
| gcgacggatt | cgcgctatct | agaaagagag | agcaatattt | caagaatgca | tgcgtcaatt | 660 |
| ttacgcagac | tatctttcta | gggttaaaaa | agatttgctc | tttactcgac | ctaaacttta | 720 |
| aacacgtcat | agaatcttcg | tttgacaaaa | accacattgt | ggccaagctg | tgtgacgcga | 780 |
| cgcgcgctaa | agaatggcaa | accaagtcgc | gcgagcgctc | acctgcaggc | atgcaagctt | 840 |
| gcatgcctgc | aggtcgaaat | tcgtaatcat | ggtcatagct | gtttcctgtg | tgaaattggt | 900 |
| atccgctcac | aattccacac | aacatacgag | ccggaagcat | aaagtgtaaa | gcctgggggtg | 960 |
| cctaattgagt | gagctaactc | acattaattg | cgttgcgctc | actgcccgtc | ttccagtcgg | 1020 |
| gaaacctgtc | gtgccagctg | cattaatgaa | tcggccaacg | cgcggggaga | ggcggtttgc | 1080 |
| gtattgggcg | ctcttccgct | tcctcgctca | ctgactcgct | gcgctcggtc | gttcggctgc | 1140 |
| ggcgagcggg | atcagctcac | tcaaaggcgg | taatacgggt | atccacagaa | tcaggggata | 1200 |
| acgcaggaaa | gaacatgtga | gcaaaaggcc | agcaaaaggc | caggaaccgt | aaaaaggccg | 1260 |
| cgttgctggc | gtttttccat | aggctccgcc | cccctgacga | gcatcacaaa | aatcgacgct | 1320 |
| caagtcagag | gtggcgaaac | ccgacaggac | tataaagata | ccaggcggtt | ccccctggaa | 1380 |
| gctccctcgt | gcgctctcct | gttccgacct | tgccgcttac | cggatacctg | tccgcctttc | 1440 |
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| aggtcgttcg | ctccaagctg | ggctgtgtgc | acgaaccccc | cgttcagccc | gaccgctgcg | 1560 |
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| tgaagtgggtg | gcctaactac | ggctacacta | gaaggacagt | atttggtatc | tgcgctctgc | 1740 |
| tgaagccagt | taccttcgga | aaaagagttg | gtagctcttg | atccggcaaa | caaaccaccg | 1800 |
| ctggtagcgg | tggttttttt | gtttgcaagc | agcagattac | gcgcagaaaa | aaaggatctc | 1860 |
| aagaagatcc | tttgatcttt | tctacggggt | ctgacgctca | gtggaacgaa | aactcacggt | 1920 |
| aagggatttt | ggtcatgaga | ttatcaaaaa | ggatcttcac | ctagatcctt | ttaaattaaa | 1980 |
| aatgaagttt | taaatcaatc | taaagtatat | atgagtaaac | ttggtctgac | agttaccaat | 2040 |

7-06.WPP88353.txt

| | | | | | | |
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| gactccccgt | cgtgtagata | actacgatac | gggagggcct | accatctggc | cccagtgctg | 2160 |
| caatgatacc | gcgagacca | cgctcaccgg | ctccagattt | atcagcaata | aaccagccag | 2220 |
| ccggaagggc | cgagcgcaga | agtggtcctg | caactttatc | cgcctccatc | cagtctatta | 2280 |
| attgttgccg | ggaagctaga | gtaagtagtt | cgccagttaa | tagtttgcg | aacgttgttg | 2340 |
| ccattgctac | aggcatcgtg | gtgtcacgct | cgctgtttgg | tatggcttca | ttcagctccg | 2400 |
| gttcccaacg | atcaaggcga | gttacatgat | cccccatgtt | gtgcaaaaaa | gcggttagct | 2460 |
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7-06.WPP88353.txt

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7-06.WPP88353.txt

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| tgttatctat | agataatttt | gttgcaaaat | atgttgacta | tgacaaagat | tgtatgtata | 6000 |
| tacctttaat | gtattctcat | tttcttatgt | atttataatg | gcaatgatga | tactgatgat | 6060 |
| attttaagat | gatgccagac | cacaggctga | tttctgcgtc | ttttgccgaa | cgcagtgcac | 6120 |
| gtgcggttgt | tgtttttttg | aatagtttca | attttcggac | tgtccgcttt | gatttcagtt | 6180 |
| tcttggttta | ttcaaaaagc | aaagtaaagc | caaaaaagcg | agatggcaat | accaaagtcg | 6240 |
| gcaaaacggt | agtggaagga | aaggggtgcg | gggcagcggg | aggaaggggtg | gggcggggcg | 6300 |
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| gcgtcatttt | ggctcgaaat | aggcaattat | ttaaacaaaag | attagtcaac | gaaaacgcta | 6540 |
| aaataaataa | gtctacaata | tggttactta | ttgccatgtg | tgtgcagcca | acgatagcaa | 6600 |
| caaaagcaac | aacacagtgg | ctttccctct | ttcacttttt | gtttgcaagc | gcgtgcgagc | 6660 |
| aagacggcac | gaccggcaaa | cgcaattacg | ctgacaaaaga | gcagacgaag | ttttggccga | 6720 |
| aaaacatcaa | ggcgcctgat | acgaatgcat | ttgcaataac | aattgcgata | tttaatatgt | 6780 |
| tttatgaagc | tgtttgactt | caaaacacac | aaaaaaaaaa | ataaaacaaa | ttatttgaaa | 6840 |
| gagaattagg | aatcggacag | cttatcgtaa | cgggctaaca | gcacaccgag | acgaaatagc | 6900 |
| ttacctgacg | tcacagcctc | tggaagaact | gccgccaagc | agacgatgca | gaggacgaca | 6960 |
| catagagtag | cggagtaggc | cagcgtagta | cgcatgtgct | tgtgtgtgag | gcgtctctct | 7020 |
| cttcgtctcc | tgtttgcgca | aacgcataga | ctgcactgag | aaaatcgatt | acctattttt | 7080 |
| tatgaatgaa | tatttgcact | attactattc | aaaactatta | agatagcaat | cacattcaat | 7140 |
| agccaaatac | tataccacct | gagcgatgca | acgaaatgat | caatttgagc | aaaaatgctg | 7200 |
| catatttagg | acggcatcat | tatagaaatg | cttcttgctg | tgtacttttc | tctcgtctgg | 7260 |
| cagctgtttc | gccgttattg | ttaaaaccgg | cttaagttag | gtgtgttttc | tacgactagt | 7320 |
| gatgccccta | ctagaagatg | tgtgttgcac | aatgtccct | gaataaccaa | tttgaagtgc | 7380 |
| agatagcagt | aaacgtaagc | taatatgaat | attatttaac | tgtaatgttt | taatatcgct | 7440 |
| ggacattact | aataaaccba | ctataaacac | atgtacatat | gtatgttttg | gcatacaatg | 7500 |
| agtagttggg | gaaaaaatgt | gtaaaagcac | cgtgaccatc | acagcataaa | gataaccagc | 7560 |
| tgaagtatcg | aatatgagta | acccccaaat | tgaatcacat | gccgcaactg | ataggaccca | 7620 |
| tggaagtaca | ctcttcatgg | cgatatacaa | gacacacaca | agcacgaaca | cccagttgcg | 7680 |
| gaggaaattc | tccgtaaatg | aaaaccbaat | cggcgaacaa | ttcataccca | tatatggtaa | 7740 |

7-06.WPP88353.txt

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|------|
| aagttttgaa | cgcgacttga | gagcggagag | cattgcggct | gataaggttt | tagcgctaag | 7800 |
| cgggctttat | aaaacgggct | gcgggaccag | ttttcatatc | actaccgttt | gagttcttgt | 7860 |
| gctgtgtgga | tactcctccc | gacacaaagc | cgctccatca | gccagcagtc | gtctaatacca | 7920 |
| gagaccccg | atctagaacc | aaaatggcta | gaatggcctc | ctccgagaac | gtcatcaccg | 7980 |
| agttcatg | cttcaagg | cgcatggagg | gcaccgtgaa | cggccacgag | ttcgagatcg | 8040 |
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| aggtgtacgt | gaagcacc | gccgacatcc | ccgactacaa | gaagctgtcc | ttccccgagg | 8220 |
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| actcctccct | gcaggacggc | tgcttcatct | acaagggtgaa | gttcatcggc | gtgaacttcc | 8340 |
| cctccgacgg | ccccgtgatg | cagaagaaga | ccatgggctg | ggaggcctcc | accgagcgcc | 8400 |
| tgtacccccg | cgacggcgtg | ctgaagggcg | agaccacaaa | ggccctgaag | ctgaaggacg | 8460 |
| gcggccacta | cctggtggag | ttcaagtcca | tctacatggc | caagaagccc | gtgcagctgc | 8520 |
| ccggctacta | ctacgtggac | gccaaactgg | acatcacctc | ccacaacgag | gactacacca | 8580 |
| tcgtggagca | gtacgagcgc | accgagggcc | gccaccacct | gttcctgtga | gatccatgag | 8640 |
| caattagcat | gaacgttctg | aaaagcgcgt | ttagctctcc | actacttaca | catattctat | 8700 |
| gctgcaatat | tgaaaatcta | ataaacaana | ctaattgtaca | ttaattcttc | agttttgaat | 8760 |
| atccttctcc | tgactttctt | atttagaatt | aatataatac | tgatacatt | aatactgtaa | 8820 |
| atatgataag | tacctgcaaa | acactgcagc | tcaagtctta | atgaggttct | gcgatagctt | 8880 |
| agcataatta | gtaacttatc | gcgcagaatt | ccctaattgt | cccgcctac | atgtacttct | 8940 |
| gatagttgcc | gaggtcaa | gttggtgtat | ttgtattata | cctcaatatt | ggtatattca | 9000 |
| atatctaata | gtaccaat | caattgcaaa | gatagtcatt | aaaaaacct | aatcacttg | 9060 |
| caaattgact | tttctgccg | aaaagcaacc | ttgacacaca | aagttaatta | gtttatctgg | 9120 |
| aagtcatgtg | agaaattt | aaataaaatt | tttcgcagta | atttaagtgg | gcctaatccc | 9180 |
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| tctcgagggg | gggcctta | taagaggcgc | gccagggttc | gactttcact | tttctctatc | 9480 |
| actgataggg | agtggtaa | tcgactttca | cttttctcta | tcactgatag | ggagtggtaa | 9540 |
| actcgacttt | cacttttctc | tatcactgat | agggagtgg | aaactcgact | ttcacttttc | 9600 |

7-06.WPP88353.txt

| | | | | | | |
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| tggtaaactc | gacttttact | tttctctatc | actgataggg | agtggtaaac | tcgactttca | 9720 |
| cttttctcta | tcactgatag | ggagtggtaa | actcgaaaac | gagcgccgga | gtataaatag | 9780 |
| aggcgcttcg | tctacggagc | gacaattcaa | ttcaaacaag | caaagtgaac | acgtcgctaa | 9840 |
| gcgaaagcta | agcaaataaa | caagcgcagc | tgaacaagct | aaacaatctg | cggtagccctg | 9900 |
| gcggtaagtt | gatcaaagga | aacgcaaagt | tttcaagaaa | aaacaaaact | aatttgattt | 9960 |
| ataacacctt | tagaaaccac | catgggcagc | cgcctggata | agtccaaagt | catcaactcc | 10020 |
| gcgttgagcg | tggtgaacga | agttggcatt | gagggactga | cgacccgcaa | gttggcgag | 10080 |
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| gagtcctggc | aggacttcct | ccgcaataac | gccaagtcgt | tccgctgcgc | tctgctgtcc | 10260 |
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| gctctgagcg | ccgtcgggtca | ctttaccctg | ggctgcgtgc | tgaggagacca | agagcatcaa | 10440 |
| gtcgcaaaag | aggagcgcga | gaccccaaca | accgattcga | tgccccact | gctgcgtcag | 10500 |
| gcaatcgagc | tgttcgatca | tcaaggagcc | gagccggcat | tcctgttcgg | cttggagctg | 10560 |
| attatctgcg | gattggaaaa | gcaactgaaa | tgcgagtcgg | gctcggggccc | cgcgtacagc | 10620 |
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| aatttaattg | caaatagaga | gtcctaagac | taaataatat | atttaaaaat | ctggcccttt | 11460 |
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7-06.WPP88353.txt

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gtttgggagc tccaagcggc gactgagatg tcctaaatgc acagcgacgg attcgcgcta 11880
tttagaaaga gagagcaata tttcaagaaa aacggcgccc 11920

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<211> 11570
<212> DNA
<213> Artificial

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<220>
<223> pLA517

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<400> 17
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gcgagatacc ggaagtactg aaaaacagtc gctccaggcc agtgggaaca tcgatgtttt 120
gttttgacgg accccttact ctcgtctcat ataaaccgaa gccagctaag atggtatact 180
tattatcatc ttgtgatgag gatgcttcta tcaacgaaag taccggtaaa ccgcaaatgg 240
ttatgtatta taatcaaaact aaaggcggag tggacacgct agaccaaagtg tgttctgtga 300
tgacctgcag taggaagacg aataggtggc ctatggcatt attgtacgga atgataaaca 360
ttgcctgcat aaattctttt attatataca gccataatgt cagtagcaag ggagaaaagg 420
tccaaagtcg caaaaaattt atgagaaacc tttacatgag cctgacgtca tcgtttatgc 480
gtaagcgttt agaagctcct actttgaaga gatatttgcg cgataaatatc tctaataattt 540
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taaacataaa taaattgttt gttgaattta ttattagtag gtaagtgtaa atataataaa 960
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aaataatagt ttctaatttt tttattattc agcctgctgt cgtgaatacc gtatatctca 1140

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7-06.WPP88353.txt

| | | | | | | |
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| ttgtccgaca | catttttcgtc | gattttgcgtt | ttgatcaaag | acttgagcag | agacacgtta | 1260 |
| atcaactggt | caaattgatc | catattaacg | atatcaaccc | gatgcgtata | tggtgcgtaa | 1320 |
| aatatatttt | ttaaccctct | tatactttgc | actctgcgtt | aatacgcgtt | cgtgtacaga | 1380 |
| cgtaatcatg | ttttcttttt | tgataaaaac | tcctactgag | tttgacctca | tattagaccc | 1440 |
| tcacaagttg | caaaacgtgg | catttttttac | caatgaagaa | tttaaagtta | ttttaaaaaa | 1500 |
| tttcatcaca | gatttaaaga | agaacaaaaa | attaaattat | ttcaacagtt | taatcgacca | 1560 |
| gttaatcaac | gtgtacacag | acgcgtcggc | aaaaaacacg | cagcccgcag | tgttggctaa | 1620 |
| aattattaaa | tcaacttggt | ttatagtcac | ggatttgccg | tccaacgtgt | tcctcaaaaa | 1680 |
| gttgaagacc | aacaagttta | cggacactat | taattatttg | attttgcccc | acttcatttt | 1740 |
| gtgggatcac | aattttgtta | tatttttaaac | aaagcttggc | actggccgtc | gttttacaac | 1800 |
| gtcgtgactg | ggaaaaccct | ggcgttaccc | aacttaatcg | ccttgacgca | catccccctt | 1860 |
| tcgccagctg | gcgtaatagc | gaagaggccc | gcaccgatcg | cccttcccaa | cagttgcgca | 1920 |
| gcctgaatgg | cgaatggcgc | ctgatgcggt | attttctcct | tacgcatctg | tgcggtattt | 1980 |
| cacaccgcat | atggtgcact | ctcagtacaa | tctgctctga | tgccgcatag | ttaagccagc | 2040 |
| cccgacaccc | gccaacaccc | gctgacgcgc | cctgacgggc | ttgtctgctc | ccggcatccg | 2100 |
| cttacagaca | agctgtgacc | gtctccggga | gctgcatgtg | tcagaggttt | tcaccgtcat | 2160 |
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| tgataataat | ggttttcttag | acgtcaggtg | gcacttttcg | gggaaatgtg | cgcggaaccc | 2280 |
| ctattttgtt | atttttctaa | atacattcaa | atatgtatcc | gctcatgaga | caataaccct | 2340 |
| gataaatgct | tcaataatat | tgaaaaagga | agagtatgag | tattcaacat | ttccgtgtcg | 2400 |
| cccttattcc | cttttttgcg | gcattttgcc | ttcctgtttt | tgctcaccca | gaaacgctgg | 2460 |
| tgaaagtaaa | agatgctgaa | gatcagttgg | gtgcacgagt | gggttacatc | gaactggatc | 2520 |
| tcaacagcgg | taagatcctt | gagagttttc | gccccgaaga | acgttttcca | atgatgagca | 2580 |
| cttttaaagt | tctgctatgt | ggcgcggtat | tatcccgtat | tgacgccggg | caagagcaac | 2640 |
| tcggtcgccg | catacactat | tctcagaatg | acttggttga | gtactcacca | gtcacagaaa | 2700 |
| agcatcttac | ggatggcatg | acagtaagag | aattatgcag | tgctgccata | accatgagtg | 2760 |
| ataaactgct | ggccaactta | cttctgacaa | cgatcgagg | accgaaggag | ctaaccgctt | 2820 |
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7-06.WPP88353.txt

| | |
|--|------|
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| ctccattgtc | tcggttacct | ttggtcaa | ccatgggttc | tattgcctat | atactcttgc | 5400 |
| gattaccagt | gattgcgcta | ttagctatta | gatggattgt | tggccaaact | tgctcgcttaa | 5460 |
| gtggctggga | attgtaaccg | taggcccag | tgtaatgatc | ccccataaaa | agttttcgca | 5520 |
| atgcctttat | tttttgttgc | aaatctctct | ttattctgcg | gtattcttca | ttattgcggg | 5580 |
| gatggggaaa | gtgtttatat | agaagcaact | tacgattgaa | cccaaagca | cctgacaagc | 5640 |
| aaggtcaaag | ggccagattt | ttaaataat | tatttagtct | taggactctc | tatttgcaat | 5700 |
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| ctataaactg | tgctttacaa | atacttgcaa | ctcttctcgt | tttgaagtca | gcagagttat | 5880 |
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| gccggctcgg | ctccttgatg | atcgaacagc | tcgattgcct | gacgcagcag | tgggggcatc | 6360 |
| gaatcggttg | ttgggggtctc | gcgctcctct | tttgcgactt | gatgctcttg | gtcctccagc | 6420 |
| acgcagccca | gggtaaagtg | accgacggcg | ctcagagcgt | agagagcatt | ttccaggctg | 6480 |
| aagccttgct | ggcacaggaa | cgcgagctgg | ttctccagtg | tctcgtattg | cttttcggtc | 6540 |
| gggcgcgtgc | cgagatggac | tttggcaccg | tctcggtg | acagcagagc | gcagcggaac | 6600 |
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| gtgtggtggc | ggtcgagcat | ctcgatggcc | agggcatcca | gcagcgcccg | cttattcttc | 6720 |
| acgtgccagt | agagggtggg | ctgctccacg | cccagcttct | gcgccaactt | gcgggtcgtc | 6780 |
| agtccttcaa | tgccaacttc | gttcaacagc | tccaacgcgg | agttgatgac | tttggactta | 6840 |

7-06.WPP88353.txt

| | | | | | | |
|-------------|-------------|-------------|------------|------------|-------------|------|
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| tcttgaaaac | tttgcgtttc | ctttgatcaa | cttaccgcca | gggtaccgca | gattgttttag | 6960 |
| cttgttcagc | tgcgcttggt | tatttgctta | gctttcgctt | agcgacgtgt | tcactttgct | 7020 |
| tgtttgaatt | gaattgtcgc | tccgtagacg | aagcgctctt | atttatactc | cggcgctcgt | 7080 |
| tttcgagttt | accactccct | atcagtgata | gagaaaagtg | aaagtcgagt | ttaccactcc | 7140 |
| ctatcagtga | tagagaaaag | tgaaagtcga | gtttaccact | ccctatcagt | gatagagaaa | 7200 |
| agtgaaagtc | gagttttacca | ctccctatca | gtgatagaga | aaagtgaaag | tcgagtttac | 7260 |
| cactccctat | cagtgataga | gaaaagtga | agtcgagttt | accactccct | atcagtgata | 7320 |
| gagaaaagtg | aaagtcgagt | ttaccactcc | ctatcagtga | tagagaaaag | tgaaagtcga | 7380 |
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| ggtgatgtcc | agcttggcgt | ccacgtagta | gtagccgggc | agctgcacgg | gcttcttggc | 8340 |
| catgtagatg | gacttgaact | ccaccaggta | gtggccgccg | tccttcagct | tcagggcctt | 8400 |
| gtgggtctcg | cccttcagca | cgccgtcgcg | ggggtacagg | cgctcgggtg | aggcctccca | 8460 |
| gcccattggtc | ttcttctgca | tcacggggcc | gtcggagggg | aagttcacgc | cgatgaactt | 8520 |
| cacctttag | atgaagcagc | cgctctgcag | ggaggagtcc | tgggtcacgg | tcgccacgcc | 8580 |
| gccgtcctcg | aagttcatca | cgcgtcccca | cttgaagccc | tcggggaagg | acagcttctt | 8640 |
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7-06.WPP88353.txt

| | | | | | | |
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7-06.WPP88353.txt

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ttgtgttttt agaatataga attctagtat gtatgtaagt taataaaacc cttttttgcg 11520
gaaagtagat aaaaaaaca tttttttttt ttactgcact ggatatctgc 11570

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<211> 11251
<212> DNA
<213> Artificial

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<220>
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gcccgaagac gcttctttga tcgcttcttt ctcgaatgta catattgata tgtatttggt 180
gtttggcgac gatcagccag ctttaatggc cataaaacgt gtcttggttt gtgggccaca 240
taacaggcag cgagatctgg aaaaatgatg tgacagtgga aatgagaagt aggtgcatct 300
gcaaagattt gattcagagt tgatgccatt catgattttt tttagaagta tcatttgtgt 360
ttttagaata tagaattcta gtatgtatgt aagttaataa aaccattttt tgcggaaagt 420
agataaaaaa aacatttttt ttttttactg cactggatat ctgcggccgc tcatttaaatt 480
ctggccggcc gcaaccattg tgggaaccgt gcgatcaaac aaacgcgaga taccggaagt 540
actgaaaaac agtcgctcca ggccagtggtg aacatcgatg ttttgttttg acggaccctt 600

```


7-06.WPP88353.txt

| | | | | | | |
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| tgaggatgct | tctatcaacg | aaagtaccgg | taaaccgcaa | atggttatgt | attataatca | 720 |
| aactaaaggc | ggagtggaca | cgctagacca | aatgtgttct | gtgatgacct | gcagtaggaa | 780 |
| gacgaatagg | tggcctatgg | cattattgta | cggaatgata | aacattgcct | gcataaattc | 840 |
| ttttattata | tacagccata | atgtcagtag | caagggagaa | aagggtccaaa | gtcgcaaaaa | 900 |
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| tcctactttg | aagagatatt | tgcgcgataa | tatctctaata | atgttgccaa | atgaagtgcc | 1020 |
| tggtacatca | gatgacagta | ctgaagagcc | agtaatgaaa | aaacgtactt | actgtactta | 1080 |
| ctgcccctct | aaaataaggc | gaaaggcaaa | tgcatcgtgc | aaaaaatgca | aaaaagttat | 1140 |
| ttgtcgagag | cataatattg | atatgtgccca | aagttgtttc | tgactgacta | ataagtataa | 1200 |
| tttgtttcta | ttatgtataa | gttaagctaa | ttacttattt | tataatacaa | catgactgtt | 1260 |
| tttaaagtac | aaaataagtt | tattttttgta | aaagagagaa | tgtttaaaag | ttttgttact | 1320 |
| ttatagaaga | aattttgagt | ttttgttttt | ttttaataaa | taaataaaca | taaataaatt | 1380 |
| gtttgttgaa | tttattatta | gtatgtaagt | gtaaaataaa | taaaacttaa | tatctattca | 1440 |
| aattaataaa | taaacctcga | tatacagacc | gataaaacac | atgcgtcaat | tttacgcatg | 1500 |
| attatcttta | acgtacgtca | caatatgatt | atctttctag | ggttaaataa | tagtttctaa | 1560 |
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| tgtcgtattc | tagccttttt | agtttttcgc | tcatcgactt | gatattgtcc | gacacatttt | 1680 |
| cgtcgatttg | cgttttgatc | aaagacttga | gcagagacac | gttaatcaac | tgttcaaatt | 1740 |
| gatccatatt | aacgatatca | acccgatgcg | tatatggtgc | gtaaaatata | ttttttaacc | 1800 |
| ctcttatact | ttgcaactctg | cgtttaatacg | cgttcgtgta | cagacgtaat | catgttttct | 1860 |
| tttttgata | aaactcctac | tgagtttgac | ctcatattag | accctcacia | gttgcaaaac | 1920 |
| gtggcatttt | ttaccaatga | agaatttaaa | gttattttta | aaaatttcat | cacagattta | 1980 |
| aagaagaacc | aaaaattaaa | ttatttcaac | agtttaaatcg | accagttaat | caacgtgtac | 2040 |
| acagacgcgt | cggcaaaaaa | cacgcagccc | gacgtgttgg | ctaaaattat | taaatcaact | 2100 |
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| gttatatttt | aaacaaagct | tggaactggc | cgtcgtttta | caacgtcgtg | actgggaaaa | 2280 |
| ccctggcggt | acccaactta | atcgcccttg | agcacatccc | cctttcgcca | gctggcgtaa | 2340 |
| tagcgaagag | gccccgaccg | atcgcccttc | ccaacagttg | cgcagcctga | atggcggaatg | 2400 |
| gcgcctgatg | cggtattttc | tccttacgca | tctgtgcggt | atttcacacc | gcatatggtg | 2460 |
| cactctcagt | acaatctgct | ctgatgccgc | atagttaagc | cagccccgac | acccgccaac | 2520 |

7-06.WPP88353.txt

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|------|
| acccgctgac | gcgccctgac | gggcttgtct | gctccccgca | tccgcttaca | gacaagctgt | 2580 |
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| ggatcatgta | actcgccttg | atcgttggga | accggagctg | aatgaagcca | taccaaacga | 3360 |
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7-06.WPP88353.txt

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| cgcaattaat | gtgagttagc | tcactcatta | ggcaccacag | gctttacact | ttatgcttcc | 4800 |
| ggctcgtatg | ttgtgtggaa | ttgtgagcgg | ataacaattt | cacacaggaa | acagctatga | 4860 |
| ccatgattac | gaatttcgac | ctgcaggcat | gcaagcttgc | atgcctgcag | gtcgacgctc | 4920 |
| gcgcgacttg | gtttgccatt | cttttagcgcg | cgtcgcgtca | cacagcttgg | ccacaatgtg | 4980 |
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| ctctctcttt | ctaaatagcg | cgaatccgtc | gctgtgcatt | taggacatct | cagtcgccgc | 5160 |
| ttggagctcc | cgtgaggcgt | gcttgtcaat | gcggtaagtg | tactgattt | tgaactataa | 5220 |
| cgaccgcgtg | agtcaaaatg | acgcatgatt | atctttttacg | tgacttttaa | gatttaactc | 5280 |
| atacgataat | tatattgtta | tttcatgttc | tacttacgtg | ataacttatt | atatatatat | 5340 |
| tttcttggtta | tagatatcgt | gactaatata | taataaaatg | ggtagttctt | tagacgatga | 5400 |
| gcatatcctc | tctgctcttc | tgcaaagcga | tgacgagcct | gttggtgagg | attctgacag | 5460 |
| tgaaatatca | gatcacgtaa | gtgaagatga | cgtccagagc | gatacagaag | aagcgtttat | 5520 |
| agatgaggta | catgaagtgc | agccaacgtc | aagcggtagt | gaaatattag | acgaacaaaa | 5580 |
| tgttattgaa | caaccaggtt | cttcattggc | ttctaacaga | atcttgacct | tgccacagag | 5640 |
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7-06.WPP88353.txt

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| agttattgct | aattgctaata | tgctaattgc | ttttaactga | tttcttcgaa | attggtgcta | 6480 |
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| atccagagcg | ccgtaggggg | cggagtcgtg | gggggtaa | cccggacccg | gggaatcccc | 6780 |
| gtcccccaac | atgtccagat | cgaaatcgtc | tagcgcgctg | gcatgcgcca | tcgccacgtc | 6840 |
| ctcgccgtct | aagtggagct | cgtccccag | gctgacatcg | gtcggggggg | ccgtcgacag | 6900 |
| tctgcgctg | tgtcccgcg | ggagaaagga | caggcgcgga | gccgccagcc | ccgcctcttc | 6960 |
| gggggctcg | tcgtccggga | gatcgagcag | gccctcgatg | gtagaccctg | aattgttttt | 7020 |
| cgtacgcg | cggctgtacg | cggggccga | gcccgaactc | catttcagtt | gcttttccaa | 7080 |
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7-06.WPP88353.txt

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| caagttaaca | acaacaattg | cattcatttt | atgtttcagg | ttcaggggga | gggtgtgggag | 8400 |
| gttttttaaa | gcaagtaaaa | cctctacaaa | tgtggtatgg | ctgattatga | tcagttatct | 8460 |
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| tgagtttcgt | tgaaattaca | aaactattga | aactaacttc | ctggctgggg | aataaaaaatg | 9360 |
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| ttgtgacttt | cgagaatggt | cttttaattg | tactttaatc | accaacaatt | aagtataaat | 10080 |

7-06.WPP88353.txt

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| ttgatacgta | cgaatacctt | gtattaaaaat | tttttatgat | ttctgtgtat | cacttttttt | 10320 |
| ttgtgttttt | cgtttaaaact | caccacagta | caaaacaata | aaatatTTTT | aagacaattt | 10380 |
| caaattgaga | cctttctcgt | actgacttga | ccggctgaat | gaggatttct | acctagacga | 10440 |
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| aaggcttggt | aggattgggtg | tttatttagt | ttgcttttga | aatagcactg | tcttctctac | 10560 |
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| cgttccggcg | acaagatcgg | ggtaccgcga | t | | | 11251 |

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 <211> 9468
 <212> DNA
 <213> Artificial

<220>
 <223> pLA710

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| gcgagatacc | ggaagtactg aaaaacagtc gctccaggcc agtgggaaca tcgatgtttt 120 |
| gttttgacgg | acccttact ctcgtctcat ataaaccgaa gccagctaag atggtatact 180 |
| tattatcatc | ttgtgatgag gatgcttcta tcaacgaaag taccggtaaa ccgcaaattg 240 |
| ttatgtatta | taatcaaact aaaggcggag tggacacgct agaccaaattg tgttctgtga 300 |
| tgacctgcag | taggaagacg aataggtggc ctatggcatt attgtacgga atgataaaca 360 |

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|------|
| ttgcctgcat | aaattctttt | attatataca | gccataatgt | cagtagcaag | ggagaaaagg | 420 |
| tccaaagtcg | caaaaaat | atgagaaacc | tttcatgag | cctgacgtca | tcgtttatgc | 480 |
| gtaagcgttt | agaagctcct | actttgaaga | gatatttgcg | cgataatatc | tctaataattt | 540 |
| tgccaaatga | agtgcctggt | acatcagatg | acagtactga | agagccagta | atgaaaaaac | 600 |
| gtacttactg | tacttactgc | ccctctaaaa | taaggcgaaa | ggcaaagtca | tcgtgcaaaa | 660 |
| aatgcaaaaa | agttatttgt | cgagagcata | atattgatat | gtgccaaagt | tgtttctgac | 720 |
| tgactaataa | gtataatttg | tttctattat | gtataagtta | agctaattac | ttattttata | 780 |
| atacaacatg | actgttttta | aagtacaaaa | taagtttatt | tttgtaaaag | agagaatggt | 840 |
| taaaagtttt | gttactttat | agaagaaatt | ttgagttttt | gttttttttt | aataaataaa | 900 |
| taaacataaa | taaattgttt | gttgaattta | ttattagtat | gtaagtgtaa | atataataaa | 960 |
| acttaatatc | tattcaaatt | aataaataaa | cctcgatata | cagaccgata | aaacacatgc | 1020 |
| gtcaatttta | cgcattgatta | tctttaacgt | acgtcacaa | atgattatct | ttctagggtt | 1080 |
| aaataatagt | ttctaatttt | tttattattc | agcctgctgt | cgtgaatacc | gtatatctca | 1140 |
| acgctgtctg | tgagattgtc | gtattctagc | cttttttagt | tttcgctcat | cgacttgata | 1200 |
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| gttgaagacc | aacaagttta | cggacactat | taattatttg | atgttgcccc | acttcatttt | 1740 |
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| gtcgtgactg | ggaaaaccct | ggcgttaccc | aacttaatcg | ccttgacgca | catccccctt | 1860 |
| tcgccagctg | gcgtaatagc | gaagaggccc | gcaccgatcg | cccttcccaa | cagttgcgca | 1920 |
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| tgataataat | ggtttcttag | acgtcaggtg | gcacttttctg | gggaaatgtg | cgcggaaccc | 2280 |

7-06.WPP88353.txt

| | | | | | | |
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7-06.WPP88353.txt

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7-06.WPP88353.txt

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| gttttgacgg | accccttact | ctcgtctcat | ataaaccgaa | gccagctaag | atggtatact | 180 |
| tattatcatc | ttgtgatgag | gatgcttcta | tcaacgaaag | taccggtaaa | ccgcaaattg | 240 |
| ttatgtatta | taatcaaact | aaaggcggag | tggacacgct | agaccaaattg | tgttctgtga | 300 |
| tgacctgcag | taggaagacg | aataggtggc | ctatggcatt | attgtacgga | atgataaaca | 360 |
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7-06.WPP88353.txt

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| acccgtaatt | gtttttcgta | cgcgcgcggc | tgtacgcggg | gcccagagcc | gactcgcatt | 6600 |
| tcagttgctt | ttccaatccg | cagataatca | gctccaagcc | gaacaggaat | gccggctcgg | 6660 |
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| agaggggtggg | ctgctccacg | cccagcttct | gcgccaactt | gcgggtcgtc | agtccctcaa | 7140 |
| tgccaacttc | gttcaacagc | tccaacgcgg | agttgatgac | tttggactta | tccaggcggc | 7200 |
| tgcccatggt | ggtttctaaa | ggtgttataa | atcaaattag | ttttgttttt | tcttgaaaac | 7260 |
| tttgcgtttc | ctttgatcaa | cttaccgcca | gggtaccgca | gattgttttag | cttgttcagc | 7320 |
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| gaattgtcgc | tccgtagacg | aagcgcctct | atttatactc | cggcgctcgt | tttcgagttt | 7440 |
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| tagagaaaag | tgaaagtcga | gtttaccact | ccctatcagt | gatagagaaa | agtgaaagtc | 7560 |
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7-06.WPP88353.txt

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| aaagtcgagt | ttaccactcc | ctatcagtga | tagagaaaag | tgaaagtcga | aacctggcgc | 7740 |
| gcctcttaat | taactcgcgt | taagatacat | tgatgagttt | ggacaaacca | caactagaat | 7800 |
| gcagtgaaaa | aatgcttta | tttgtgaaat | ttgtgatgct | attgctttat | ttgtaaccat | 7860 |
| tataagctgc | aataaacaag | ttaacaacaa | caattgcatt | cattttatgt | ttcaggttca | 7920 |
| gggggaggtg | tgggaggttt | tttaaagcaa | gtaaaacctc | tacaaatgtg | gtatggctga | 7980 |
| ttatgatcag | ttatctagat | ccggtggatc | ttacgggtcc | tccaccttcc | gctttttctt | 8040 |
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| caaaagtacg | aggtccgtta | cgggcatgct | agcgcacacg | gacaatggac | ccgacaaatt | 9360 |
| ctacgccaa | gatttaata | taatgtcggg | caacgtatcc | gttcatttta | tcaataacct | 9420 |
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7-06.WPP88353.txt

| | |
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| ttagtattga gccatgtgca aaacatgaca tcagctttta tttttataac aaatgacatc | 9660 |
| atctcttgat tgtgtttttac acgtagaatt ctactcgtaa agcgagttca gttttgaaaa | 9720 |
| acaaatgaca tcatctttttt gattgtgctt tacaagtaga attctacccg taaatcaagt | 9780 |
| tcggtttttg aaaacaaatg agtcatattg tatgatatca tattgcaaaa caaatgactc | 9840 |
| atcaatcgat cgtgcgttac acgtagaatt ctactcgtaa agcgagttta tgagccgtgt | 9900 |
| gcaaaacatg acatcatctc gatttgaaaa acaaatgaca tcatccactg atcgtgcatt | 9960 |
| acaagtagaa ttctactcgt aaagccagtt cggttatgag ccgtgtacaa aacatgacat | 10020 |
| cagattatga ctcatacttg attgtgtttt acgcgtagaa ttctactcgt aaagccagtt | 10080 |
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 <211> 10522
 <212> DNA
 <213> Artificial

<220>
 <223> pLA1124

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| <400> 21 | |
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| aatctttttt aaccctagaa agatagtctg cgtaaaattg acgcatgcat tcttgaaata | 120 |
| ttgctctctc tttctaaata gcgcgaatcc gtcgctgtgc atttaggaca tctcagtcgc | 180 |
| cgcttgagac tcccgtgagg cgtgcttgct aatgcggtaa gtgtcactga ttttgaacta | 240 |
| taacgaccgc gtgagtcaaa atgacgcatg attatctttt acgtgacttt taagatttaa | 300 |
| ctcatacgat aattatattg ttatttcatg ttctacttac gtgataactt attatatata | 360 |
| tattttcttg ttatagatat cgtgactaat atataataaa atgggtagtt ctttagacga | 420 |
| tgagcatatc ctctctgctc ttctgcaaag cgatgacgag cttgttggtg aggattctga | 480 |
| cagtgaata tcagatcacg taagtgaaga tgacgtccag agcgatacag aagaagcggt | 540 |
| tatagatgag gtacatgaag tgcagccaac gtcaagcggg agtgaaatat tagacgaaca | 600 |
| aaatgttatt gaacaaccag gttcttcatt ggcttctaac agaactttga ccttgccaca | 660 |
| gaggactatt agaggtaaga ataaacattg ttgggtcaact tcaaagtcca cgaggcgtag | 720 |
| ccgagtctct gactgaaca ttgtcagatc ggcccgggcg ccgtttttct tgaaatattg | 780 |
| ctctctcttt ctaaatagcg cgaatccgtc gctgtgcatt taggacatct cagtcgccgc | 840 |
| ttggagctcc caaacgcgcc agtggtagta cacagtactg tgggtgttca gtttgaaatc | 900 |
| ctcttgcttc tccattgtct cggttacctt tgggtcaaatc catgggttct attgcctata | 960 |

7-06.WPP88353.txt

| | |
|---|------|
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| gtcgcttaag tggctgggaa ttgtaaccgt aggcccagat gtaatgatcc cccataaaaa | 1080 |
| gttttcgcaa tgcctttatt ttttgttgca aatctctctt tattctgcgg tattcttcat | 1140 |
| tattgcgggg atggggaaa tgtttatata gaagcaactt acgattgaac ccaaatgcac | 1200 |
| ctgacaagca aggtcaaagg gccagatttt taaatatatt atttagtctt aggactctct | 1260 |
| atgtgcaatt aaattacttt gctacctgag gggttaaactt tccccattga taataataat | 1320 |
| tccactatat gttcaattgg gtttcaccgc gcttagttac atgacgagcc ctaatgagcc | 1380 |
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| cagagttatt gctaattgct aattgctaatt tgcttttaac tgatttcttc gaaattgggtg | 1500 |
| ctatgtttat ggcgctatta acaagtatga atgtcagggt taaccagggg atgcttaatt | 1560 |
| gtgttctcaa cttcaaaggc agaaatgttt actcttgacc atgggttttag gtataatgtt | 1620 |
| atcaagctcc tcgagttaac gttacgttaa cgttaacgtt cgaggctcgac tctagaacta | 1680 |
| cccaccgtac tcgtcaattc caagggcatc ggtaaacatc tgctcaaact cgaagtcggc | 1740 |
| catatccaga gcgccgtagg gggcgagtc gtggggggta aatcccggac ccggggaatc | 1800 |
| cccgtcccc aacatgtcca gatcgaaatc gtctagcgcg tcggcatgcg ccatcgccac | 1860 |
| gtcctcgccg tctaagtga gctcgtcccc caggctgaca tcggtcgggg gggccgtcga | 1920 |
| cagtctgcgc gtgtgtcccg cggggagaaa ggacaggcgc ggagccgcca gccccgcctc | 1980 |
| ttcgggggcg tcgtcgtccg ggagatcgag caggccctcg atggtagacc cgtaattgtt | 2040 |
| tttcgtacgc gcgcggctgt acgcggggcc cgagcccgac tcgcatttca gttgcttttc | 2100 |
| caatccgcag ataatcagct ccaagccgaa caggaatgcc ggctcggctc cttgatgatc | 2160 |
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| ctcctctttt gcgacttgat gctcttggtc ctccagcacg cagcccaggg taaagtgacc | 2280 |
| gacggcgctc agagcgtaga gagcattttc caggctgaag ctttgctggc acaggaacgc | 2340 |
| gagctggttc tccagtgtct cgtattgctt ttcggtcggg cgcgtgccga gatggacttt | 2400 |
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| gtcctgccag gactcgcctt ccaacgggca aaaatgcgtg tgggtggcggc cgagcatctc | 2520 |
| gatggccagg gcatccagca gcgcccgtt attcttcacg tgccagtaga ggggtgggctg | 2580 |
| ctccacgccc agcttctgcg ccaacttgcg ggtcgtcagt ccctcaatgc caacttcgtt | 2640 |
| caacagctcc aacgcggagt tgatgacttt ggacttatcc aggcggctgc ccatggtggt | 2700 |
| ttctaaaggt gttataaatc aaattagttt tgttttttct tgaaaacttt gcgtttcctt | 2760 |
| tgatcaactt accgccaggg taccgcagat tgtttagctt gttcagctgc gcttgtttat | 2820 |

7-06.WPP88353.txt

| | | | | | | |
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| agtgatagag | aaaagtgaag | gtcgagttta | ccactcccta | tcagtgatag | agaaaagtga | 3000 |
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7-06.WPP88353.txt

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7-06.WPP88353.txt

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| ataaataaat | aaacataaat | aaattgtttg | ttgaatttat | tattagtatg | taagtgtaaa | 6960 |
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7-06.WPP88353.txt

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7-06.WPP88353.txt

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| cccgtcccc | aacatgtcca | gatcgaaatc | gtctagcgcg | tcggcatgcg | ccatcgccac | | 1860 |
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| ctcctctttt | gcgacttgat | gctcttggtc | ctccagcacg | cagcccaggg | taaagtgacc | | 2280 |
| gacggcgctc | agagcgtaga | gagcattttc | caggctgaag | ccttgctggc | acaggaacgc | | 2340 |
| gagctggttc | tccagtgtct | cgtattgctt | ttcggtcggg | cgcgtgccga | gatggacttt | | 2400 |
| ggcaccgtct | cggtgggaca | gcagagcgca | gcggaacgac | ttggcgttat | tgcgaggaggaa | | 2460 |
| gtcctgccag | gactcgctt | ccaacgggca | aaaatgcgtg | tggtggcggt | cgagcatctc | | 2520 |
| gatggccagg | gcatccagca | gcgcccgtt | attcttcacc | tatagatacc | atagatgtat | | 2580 |
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| gtgatagttt | tcaccatttt | tgttgaatgt | tacgttgaaa | atttaaattt | gttttaaatt | | 2700 |
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| cgTTTTgatc | aaagacttga | gcagagacac | gttaatcaac | tgttcaaatt | gatccatatt | 8640 |
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7-06.WPP88353.txt

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7-06.WPP88353.txt

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<220>
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gttttgacgg accccttact ctcgtctcat ataaaccgaa gccagctaag atggtatact 180
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7-06.WPP88353.txt

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| tgactaataa gtataatttg tttctattat gtataagtta agctaattac ttattttata | 780 |
| atacaacatg actgttttta aagtacaaaa taagtttatt tttgtaaaag agagaatggt | 840 |
| taaaagtttt gttactttat agaagaaatt ttgagttttt gttttttttt aataaataaa | 900 |
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| aaataatagt ttctaatttt tttattattc agcctgctgt cgtgaatacc gtatatctca | 1140 |
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| tcgccagctg gcgtaatagc gaagaggccc gcaccgatcg cccttcccaa cagttgcgca | 1920 |
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| cccgcacccc gccaacaccc gctgacgcgc cctgacgggc ttgtctgctc ccggcatccg | 2100 |
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7-06.WPP88353.txt

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| tcaacagcgg | taagatcctt | gagagttttc | gccccgaaga | acgtttttcca | atgatgagca | 2580 |
| cttttaaagt | tctgctatgt | ggcgcggtat | tatcccgtat | tgacgccggg | caagagcaac | 2640 |
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| agcatcttac | ggatggcatg | acagtaagag | aattatgcag | tgctgccata | accatgagtg | 2760 |
| ataacactgc | ggccaactta | cttctgacaa | cgatcgagg | accgaaggag | ctaaccgctt | 2820 |
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7-06.WPP88353.txt

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| aaagtcgagt | ttaccactcc | ctatcagtga | tagagaaaag | tgaaagtcga | aacctggcgc | 7740 |
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| gcagtgaaaa | aatgcttta | tttgtgaaat | ttgtgatgct | attgctttat | ttgtaaccat | 7860 |
| tataagctgc | aataaacaag | ttaacaacaa | caattgcatt | cattttatgt | ttcaggttca | 7920 |
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7-06.WPP88353.txt

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| atttcacaat | ttgccaataa | atcttggcga | aatcaacac | gcaagtttta | tttatagatt | 9360 |
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7-06.WPP88353.txt

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<220>
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taacacctga tggtcagaga tgcccataa aatcacagct gttctgggtc acagtcacca 180
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agacgctttg atagatgtat ttgtatagag atagaaatta aggttaaaat aacataaatg 360
ccaaagttta gagcactatt caataattct cttgatttca aattgaaata atacacaata 420
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7-06.WPP88353.txt

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| caacaaccag | cacgttgccc | aggagctgta | ggaaagagaa | gaaggcatga | acatgggttag | 1020 |
| cagagggggc | cggtttggac | tcagagtatt | ttatcctcat | ctcaaacagt | gtatatcatt | 1080 |
| gtaaccataa | agagaaaggc | aggatgatga | ccaggggtgta | gttgtttcta | ccaataagaa | 1140 |
| tatttccacg | ccagccagaa | tttatatgca | gaaatattct | accttatcat | ttaattataa | 1200 |
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| cgtctagcgc | gtcggcatgc | gccatcgcca | cgtcctcgcc | gtctaagtgg | agctcgtccc | 1800 |
| ccaggctgac | atcgggtcgg | ggggccgctg | acagtctgcg | cgtgtgtccc | gcggggagaa | 1860 |
| aggacaggcg | cggagccgcc | agccccgcct | cttcgggggc | gtcgtcgtcc | gggagatcga | 1920 |
| gcaggccctc | gatggtagac | ccgtaattgt | ttttcgtacg | cgcgcggtg | tacgcggacc | 1980 |
| cactttcaca | tttaagttgt | ttttctaata | cgcatatgat | caattcaagg | ccgaataaga | 2040 |
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| tactatcagt | agtaggtgtt | tccctttctt | ctttagcgac | ttgatgctct | tgatcttcca | 2160 |
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| aaaaaccttg | ttggcataaa | aaggctaatt | gatttttcgag | agtttcatac | tgtttttctg | 2280 |
| taggccgtgt | acctaaatgt | acttttgctc | catcgcgatg | acttagtaaa | gcacatctaa | 2340 |
| aacttttagc | gttattacgt | aaaaaatctt | gccagctttc | cccttctaaa | gggcaaaagt | 2400 |
| gagtatggtg | cctatctaac | atctcaatgg | ctaaggcgtc | gagcaaagcc | cgcttatattt | 2460 |
| ttacatgcca | atacaatgta | ggctgctcta | cacctagctt | ctgggagagt | ttacggggtg | 2520 |
| ttaaaccttc | gattccgacc | tcattaagca | gctctaatac | gctgttaata | actttacttt | 2580 |
| tatctaatac | caattccatg | gtggcaacct | gcaaggcgaa | tgaataaaca | agattgtggc | 2640 |
| gaacagtgtg | atgcgaagaa | cccacctctg | ctccaattcc | caattcccta | ttcagctcga | 2700 |

| | | | | | | |
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7-06.WPP88353.txt

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| ttgaaattac aaaactattg aaactaactt cctggctggg gaataaaaat gggaaactta | 7560 |
| tttatcgacg ccaactttgt tgagaaacct ctattaacct tctacgaata ttggaacaaa | 7620 |
| ggaaagcgaa gaaacaggaa caaaggtagt tgagaaacct gttccgttgc tcgtcatcgt | 7680 |
| tttcataatg cgagtgtgtg catgtatata tacacagctg aaacgcagtc atacacatta | 7740 |
| ttttgtgtgt atatggtgac gtcacaacta ctaagcaata agaaattttc cagacgtggc | 7800 |
| tttcgtttca agcaacctac tctatttcag ctaaaaataa gtggatttcg ttggtaaaat | 7860 |
| acttcaatta agcaaagaac taactaacta ataacatgca cacaaatgct cgagtgcgtt | 7920 |
| cgtgatttct cgaattttca aatgcgtcac tgcaatttc acaatttgcc aataaatctt | 7980 |
| ggcgaaaatc aacacgcaag ttttatttat agatttgttt gcgttttgat gccattgat | 8040 |
| tgggaaaaca agatgcgtgg ctgccaat tttattttgt aattacgtag agcgttgaat | 8100 |
| aaaaaaaaa tggccgaaca aagacctga aatgcagttt ttcttgaaat tactcaacgt | 8160 |
| cttgttgctc ttattactaa ttggtaacag cgagttaaaa acttacgttt cttgtgactt | 8220 |
| tcgagaatgt tcttttaatt gtactttaat caccaacaat taagtataaa tttttcgtg | 8280 |
| attgcgcttt actttctgct tgtacttgct gctgcaaatg tcaattgggt ttgaaggcga | 8340 |
| ccgttcgcga acgctgttta tataccttcg gtgtccgttg aaaatcacta aaaaataaccg | 8400 |

7-06.WPP88353.txt

| | | | | | | |
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| tagtgttcgt | aacacttttag | tacagagaaa | aaaaattgtg | ccgaaatggt | tttgatacgt | 8460 |
| acgaatacct | tgtattaaaa | ttttttatga | tttctgtgta | tcactttttt | tttgtgtttt | 8520 |
| tcgtttaaac | tcaccacagt | acaaaacaat | aaaatatatt | taagacaatt | tcaaattgag | 8580 |
| acctttctcg | tactgacttg | accggctgaa | tgaggatttc | tacctagacg | acctacttct | 8640 |
| taccatgaca | ttgaatgcaa | tgccaccttt | gatctaaact | tacaaaagtc | caaggcttgt | 8700 |
| taggattggg | gtttattttag | tttgcttttg | aaatagcact | gtcttctcta | ccggctataa | 8760 |
| ttttgaaact | cgcagcttga | ctggaaattt | aaaaagtaat | tctgtgtagg | taaaggggtg | 8820 |
| tttaaaagtg | tgatgtgttg | agcgttgagg | caacgactgc | tatttatgta | tatatattca | 8880 |
| aaacttattg | tttttgaagt | gttttaaagt | gagctatctg | gcaacgctgc | gcataatctt | 8940 |
| acacaagctt | ttcttaatcc | atttttaagt | gaaatttggt | tttactcttt | cggcaaataa | 9000 |
| ttgttaaata | gctttaagt | ggcttacatc | tggataagta | atgaaaacct | gcatattata | 9060 |
| atattaaaac | atataatcca | ctgtgctttc | cccgtgtgtg | gccatatacc | taaaaaagtt | 9120 |
| tatttttcga | gagccccgca | cggtcacact | acggttcggc | gattttcgat | tttggacagt | 9180 |
| actgattgca | agcgcaccga | aagcaaatg | gagctggaga | ttttgaacgc | gaagaacagc | 9240 |
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| aatgttcagt | gcagagactc | ggctacgcct | cgtggacttt | gaagttgacc | aacaatgttt | 9540 |
| attcttacct | ctaatagtcc | tctgtggcaa | ggcgaagatt | ctgttagaag | ccaatgaaga | 9600 |
| acctggttgt | tcaataacat | tttgcttcgtc | taatatttca | ctaccgcttg | acgttggtcg | 9660 |
| cacttcatgt | acctcatcta | taaacgcttc | ttctgtatcg | ctctggacgt | catcttcact | 9720 |
| tacgtgatct | gatatttcac | tgtcagaatc | ctcaccaaca | agctcgatcat | cgctttgcag | 9780 |
| aagagcagag | aggatatgct | catcgtctaa | agaactaccc | attttattat | atattagtca | 9840 |
| cgatatctat | aacaagaaaa | tatatatata | ataagttatc | acgtaagtag | aacatgaaat | 9900 |
| aacaatataa | ttatcgtatg | agttaaatct | taaaagtcac | gtaaaagata | atcatgcgtc | 9960 |
| attttgactc | acgcggtcgt | tatagttcaa | aatcagtgac | acttaccgca | ttgacaagca | 10020 |
| cgcctcacgg | gagctccaag | cggcgactga | gatgtcctaa | atgcacagcg | acggattcgc | 10080 |
| gctattttaga | aagagagagc | aatatttcaa | gaatgcagtc | gtcaatttta | cgcagactat | 10140 |
| ctttctaggg | ttaaaaaaga | tttgcgcttt | actcgacctc | aactttaaac | acgtcataga | 10200 |
| atcttcgttt | gacaaaaacc | acattgtggc | caagctgtgt | gacgcgacgc | gcgctaaaga | 10260 |

7-06.WPP88353.txt

| | | | | | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|------|--------|----|----------|-------|
| atggcaaacc | aagtcg | cgcg | agcg | tcgacc | tcgag | catg | caag | cttgca | tg | cctgcagg | 10320 |
| tcgaaattcg | taatcatggt | catagctggt | tcctgtgtga | aattgttatc | cgctcacaat | | | | | | 10380 |
| tccacacaac | atagcgccg | gaagcataaa | gtgtaaagcc | tggggtgcct | aatgagtgag | | | | | | 10440 |
| ctaactcaca | ttaattgcgt | tgcgctcact | gcccgccttc | cagtcgggaa | acctgtcgtg | | | | | | 10500 |
| ccagctgcat | taatgaatcg | gccaacgcgc | ggggagaggc | ggtttgcgta | ttgggcgctc | | | | | | 10560 |
| ttccgcttc | tcgctcactg | actcgctgcg | ctcggtcggt | cggctgcggc | gagcgggtatc | | | | | | 10620 |
| agctcactca | aaggcggtaa | tacgggttatc | cacagaatca | ggggataacg | caggaaagaa | | | | | | 10680 |
| catgtgagca | aaaggccagc | aaaaggccag | gaaccgtaaa | aaggccgcgt | tgctggcggt | | | | | | 10740 |
| tttccatagg | ctccgcccc | ctgacgagca | tcacaaaaat | cgacgctcaa | gtcagagggtg | | | | | | 10800 |
| gcgaaacccg | acaggactat | aaagatacca | ggcgcttccc | cctggaagct | ccctcg | gcg | | | | | 10860 |
| ctctcctggt | ccgaccctgc | cgcttaccgg | atacctgtcc | gcctttctcc | cttcgggaag | | | | | | 10920 |
| cgtaggcgctt | tctcaatgct | cacgctgtag | gtatctcagt | tcgggtgtagg | tcgttcgctc | | | | | | 10980 |
| caagctgggc | tgtgtgcacg | aacccccgt | tcagcccgac | cgctgcgcct | tatccggtaa | | | | | | 11040 |
| ctatcgtctt | gagtccaacc | cggtaaagaca | cgacttatcg | ccactggcag | cagccactgg | | | | | | 11100 |
| taacaggatt | agcagagcga | ggtatgtagg | cggtgctaca | gagttcttga | agtgggtggc | | | | | | 11160 |
| taactacggc | tacactagaa | ggacagtatt | tggatatctgc | gctctgctga | agccagttac | | | | | | 11220 |
| cttcggaaaa | agagttggta | gctcttgatc | cggcaaacaa | accaccgctg | gtagcgggtg | | | | | | 11280 |
| tttttttggt | tgcaagcagc | agattacgcg | cagaaaaaaaa | ggatctcaag | aagatccttt | | | | | | 11340 |
| gatcttttct | acgggggtctg | acgctcagt | gaacgaaaac | tcacgttaag | ggattttggt | | | | | | 11400 |
| catgagatta | tcaaaaagga | tcttcaccta | gatcctttta | aattaaaaat | gaagttttaa | | | | | | 11460 |
| atcaatctaa | agtatatatg | agtaaacttg | gtctgacagt | taccaatgct | taatcagtga | | | | | | 11520 |
| ggcacctatc | tcagcgatct | gtctatttcg | ttcatccata | gttgctgac | tccccgtcgt | | | | | | 11580 |
| gtagataact | acgatacggg | agggttacc | atctggcccc | agtgctgcaa | tgataccgcg | | | | | | 11640 |
| agaccacgc | tcaccggctc | cagatttatc | agcaataaac | cagccagccg | gaagggccga | | | | | | 11700 |
| gcgcagaagt | ggtcctgcaa | ctttatccgc | ctccatccag | tctattaatt | gttgccggga | | | | | | 11760 |
| agctagagta | agtagttcgc | cagttaatag | tttgcgcaac | gttggttgcca | ttgctacagg | | | | | | 11820 |
| catcgtgggtg | tcacgctcgt | cgtttggtat | ggcttcattc | agctccggtt | cccaacgatc | | | | | | 11880 |
| aaggcgagtt | acatgatccc | ccatgttggtg | caaaaaagcg | gtagctcct | tcggtcctcc | | | | | | 11940 |
| gatcgttgct | agaagtaagt | tggccgcagt | gttatcactc | atgggttatgg | cagcactgca | | | | | | 12000 |
| taattctctt | actgtcatgc | catccgtaag | atgcttttct | gtgactgggtg | agtactcaac | | | | | | 12060 |
| caagtcattc | tgagaatagt | gtatgcggcg | accgagttgc | tcttgcccgg | cgtaataacg | | | | | | 12120 |
| ggataatacc | gcgccacata | gcagaacttt | aaaagtgtc | atcattggaa | aacgttcttc | | | | | | 12180 |

7-06.WPP88353.txt

ggggcgaaaa ctctcaagga tcttaccgct gttgagatcc agttcgatgt aaccactcg 12240
 tgcacccaac tgatcttcag catcttttac tttcaccagc gtttctgggt gagcaaaaac 12300
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7-06.WPP88353.txt

| | |
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| cgccttattt tagaggggca gtaagtacag taagtacgtt ttttcattac tggctcttca | 14160 |
| gtactgtcat ctgatgtacc aggcaattca tttggcaaaa tattagagat attatcgcg | 14220 |
| aaatatctct tcaaagtagg agcttctaaa cgcttacgca taaacgatga cgtcaggctc | 14280 |
| atgtaaagggt ttctcataaa ttttttgca ctttggacct tttctccctt gctactgaca | 14340 |
| ttatggctgt atataataaa agaatttatg caggcaatgt ttatcattcc gtacaataat | 14400 |
| gccataggcc acctattcgt cttcctactg caggatcatca cagaacacat ttgggtctagc | 14460 |
| gtgtccactc cgccttttagt ttgattataa tacataacca tttgcggttt accggtactt | 14520 |
| tcgttgatag aagcatcctc atcacaagat gataataagt ataccatctt agctggcttc | 14580 |
| ggtttatatg agacgagagt aaggggtccg tcaaaacaaa acatcgatgt tcccactggc | 14640 |
| ctggagcgac tgtttttcag tacttccggt atctcgcggt tgtttgatcg cacggttccc | 14700 |
| acaatgggtg cgccagccc | 14720 |

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 <212> DNA
 <213> Artificial

<220>
 <223> PCR Primer

| | |
|---------------------------|----|
| <400> 25 | |
| catcgatgcc cagcattgag atg | 23 |

<210> 26
 <211> 34
 <212> DNA
 <213> Artificial

<220>
 <223> PCR Primer

| | |
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| <400> 26 | |
| caagcaaagt gaacacgtcg ctaagcgaaa gcta | 34 |

<210> 27
 <211> 28
 <212> DNA
 <213> Artificial

<220>
 <223> PCR Primer

| | |
|--------------------------------|----|
| <400> 27 | |
| gccatccacg ctgttttgac ctccatag | 28 |

<210> 28
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<212> DNA
<213> Artificial

<220>
<223> PCR Primer

<400> 28
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27

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<211> 1005
<212> DNA
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<220>
<223> coding region of tTA from PUHD15-1

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ttgtattggc atgtaaaaaa taagcgggct ttgctcgacg ccttagccat tgagatgtta 180
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<210> 30
<211> 336
<212> PRT
<213> Artificial

<220>
<223> tTA

<400> 30

7-06.WPP88353.txt

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1 5 10 15

Leu Leu Asn Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala
20 25 30

Gln Lys Leu Gly Val Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn
35 40 45

Lys Arg Ala Leu Leu Asp Ala Leu Ala Ile Glu Met Leu Asp Arg His
50 55 60

His Thr His Phe Cys Pro Leu Glu Gly Glu Ser Trp Gln Asp Phe Leu
65 70 75 80

Arg Asn Asn Ala Lys Ser Phe Arg Cys Ala Leu Leu Ser His Arg Asp
85 90 95

Gly Ala Lys Val His Leu Gly Thr Arg Pro Thr Glu Lys Gln Tyr Glu
100 105 110

Thr Leu Glu Asn Gln Leu Ala Phe Leu Cys Gln Gln Gly Phe Ser Leu
115 120 125

Glu Asn Ala Leu Tyr Ala Leu Ser Ala Val Gly His Phe Thr Leu Gly
130 135 140

Cys Val Leu Glu Asp Gln Glu His Gln Val Ala Lys Glu Glu Arg Glu
145 150 155 160

Thr Pro Thr Thr Asp Ser Met Pro Pro Leu Leu Arg Gln Ala Ile Glu
165 170 175

Leu Phe Asp His Gln Gly Ala Glu Pro Ala Phe Leu Phe Gly Leu Glu
180 185 190

Leu Ile Ile Cys Gly Leu Glu Lys Gln Leu Lys Cys Glu Ser Gly Ser
195 200 205

Ala Tyr Ser Arg Ala Arg Thr Lys Asn Asn Tyr Gly Ser Thr Ile Glu
210 215 220

Gly Leu Leu Asp Leu Pro Asp Asp Asp Ala Pro Glu Glu Ala Gly Leu
225 230 235 240

Ala Ala Pro Arg Leu Ser Phe Leu Pro Ala Gly His Thr Arg Arg Leu
245 250 255

7-06.WPP88353.txt

Ser Thr Ala Pro Pro Thr Asp Val Ser Leu Gly Asp Glu Leu His Leu
260 265 270

Asp Gly Glu Asp Val Ala Met Ala His Ala Asp Ala Leu Asp Asp Phe
275 280 285

Asp Leu Asp Met Leu Gly Asp Gly Asp Ser Pro Gly Pro Gly Phe Thr
290 295 300

Pro His Asp Ser Ala Pro Tyr Gly Ala Leu Asp Met Ala Asp Phe Glu
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Phe Glu Gln Met Phe Thr Asp Ala Leu Gly Ile Asp Glu Tyr Gly Gly
325 330 335

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<213> Artificial

<220>
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1017

<210> 32
 <211> 338
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 <213> Artificial

<220>
 <223> tTAV

<400> 32

Met Gly Ser Arg Leu Asp Lys Ser Lys Val Ile Asn Ser Ala Leu Glu
 1 5 10 15

Leu Leu Asn Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala
 20 25 30

Gln Lys Leu Gly Val Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn
 35 40 45

Lys Arg Ala Leu Leu Asp Ala Leu Ala Ile Glu Met Leu Asp Arg His
 50 55 60

His Thr His Phe Cys Pro Leu Glu Gly Glu Ser Trp Gln Asp Phe Leu
 65 70 75 80

Arg Asn Asn Ala Lys Ser Phe Arg Cys Ala Leu Leu Ser His Arg Asp
 85 90 95

Gly Ala Lys Val His Leu Gly Thr Arg Pro Thr Glu Lys Gln Tyr Glu
 100 105 110

Thr Leu Glu Asn Gln Leu Ala Phe Leu Cys Gln Gln Gly Phe Ser Leu
 115 120 125

Glu Asn Ala Leu Tyr Ala Leu Ser Ala Val Gly His Phe Thr Leu Gly
 130 135 140

Cys Val Leu Glu Asp Gln Glu His Gln Val Ala Lys Glu Glu Arg Glu
 145 150 155 160

Thr Pro Thr Thr Asp Ser Met Pro Pro Leu Leu Arg Gln Ala Ile Glu
 165 170 175

Leu Phe Asp His Gln Gly Ala Glu Pro Ala Phe Leu Phe Gly Leu Glu
 180 185 190

Leu Ile Ile Cys Gly Leu Glu Lys Gln Leu Lys Cys Glu Ser Gly Ser
 195 200 205

7-06.WPP88353.txt

Gly Pro Ala Tyr Ser Arg Ala Arg Thr Lys Asn Asn Tyr Gly Ser Thr
 210 215 220

Ile Glu Gly Leu Leu Asp Leu Pro Asp Asp Asp Ala Pro Glu Glu Ala
 225 230 235 240

Gly Leu Ala Ala Pro Arg Leu Ser Phe Leu Pro Ala Gly His Thr Arg
 245 250 255

Arg Leu Ser Thr Ala Pro Pro Thr Asp Val Ser Leu Gly Asp Glu Leu
 260 265 270

His Leu Asp Gly Glu Asp Val Ala Met Ala His Ala Asp Ala Leu Asp
 275 280 285

Asp Phe Asp Leu Asp Met Leu Gly Asp Gly Asp Ser Pro Gly Pro Gly
 290 295 300

Phe Thr Pro His Asp Ser Ala Pro Tyr Gly Ala Leu Asp Met Ala Asp
 305 310 315 320

Phe Glu Phe Glu Gln Met Phe Thr Asp Ala Leu Gly Ile Asp Glu Tyr
 325 330 335

Gly Gly

<210> 33
 <211> 4455
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 <213> Artificial

<220>
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 tcaattacgg ggtcattagt tcatagccca tatatggagt tccgcgttac ataacttacg 180
 gtaaattggcc cgcctggctg accgcccac gacccccgcc cattgacgtc aataatgacg 240
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 cgctaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtac gccccctatt 360
 gacgtcaatg acggtaaatg gcccgctgg cattatgccc agtacatgac cttatgggac 420
 tttcctactt ggcagtacat ctacgtatta gtcacgcta ttaccatggt gatgcggttt 480

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| cgtaacaact | ccgccccatt | gacgcaaatg | ggcggttagc | gtgtacggtg | ggaggtctat | 660 |
| ataagcagag | ctcgttttagt | gaaccgtcag | atcgcttggg | gacgccatcc | acgctgtttt | 720 |
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| gattagataa | aagtaaagtg | attaacagcg | cattagagct | gcttaatgag | gtcggaatcg | 840 |
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| accatactca | cttttgccct | ttagaagggg | aaagctggca | agatttttta | cgtaataacg | 1020 |
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| tgtttaccga | tgcccttgga | attgacgagt | acggtgggta | gggggcgcga | ggatccagac | 1800 |
| atgataagat | acattgatga | gtttggacaa | accacaacta | gaatgcagtg | aaaaaaatgc | 1860 |
| tttatttggtg | aaatttggtga | tgctattgct | ttatttgtaa | ccattataag | ctgcaataaa | 1920 |
| caagttaaca | acaacaattg | cattcatttt | atgtttcagg | ttcaggggga | ggtgtgggag | 1980 |
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| ctaaaatgga | gaaaaaatc | actggatata | ccaccgttga | tatatcccaa | tggcatcgta | 2340 |
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| ttgtttgcaa | gcagcagatt | acgcgcagaa | aaaaaggatc | tcaagaagat | cctttgatct | 3240 |
| tttctacggg | gtctgacgct | cagtggaacg | aaaactcacg | ttaagggatt | ttggtcatga | 3300 |
| gattatcaaa | aaggatcttc | acctagatcc | ttttaaatga | aaaatgaagt | tttaaatcaa | 3360 |
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| cgaggccctt tcgtc | 4455 |